Journal of Hydrology, 128 (1991) 381–382
Elsevier Science Publishers B.V., Amsterdam

Contents

Research Papers

Review of acid-deposition–catchment interaction and comments on future research needs
E.C. Krug (Washington, DC, USA) 1
Effect of the Thomson weir and weirbox on the measurement of flow rates from micro-catchments and runoff plots
Th.M. Boers, W.H. van der Molen, L.A.A.J. Eppink (Wageningen, Netherlands) and J. Ben-Asher (Sede Boqer, Israel) 29
The importance of considering diffusion when using carbon-14 to estimate groundwater recharge to an unconfined aquifer
G.R. Walker and P.G. Cook (Glen Osmond, S.A., Australia) 41
A new chloride leaching approach to the estimation of diffuse recharge following a change in land use
G.R. Walker, I.D. Jolly and P.G. Cook (Glen Osmond, S.A., Australia) 49
Pumping tests in non-uniform aquifers — the linear strip case
J.J. Butler, Jr. and W.Z. Liu (Lawrence, KS, USA). 69
Expected probabilities of exceedance for non-normal flood distributions
T.A.G. Gunasekara and C. Cunnane (Galway, Ireland) 101
Testing lake energy budget models under varying atmospheric stability conditions
R.E. Stauffer (Madison, WI, USA). 115
Evaluation of moisture flux from chloride data in desert soils
B.R. Scanlon (Austin, TX, USA). 137
A watershed model using satellite data applied to a mountain basin in Canada
G.W. Kite (Saskatoon, Sask., Canada) 157
Effects of fluid rotary drilling on hydrochemical sampling results from deep boreholes in fractured Columbia River Basalt
D.L. Graham (Portland, OR, USA) and V.G. Johnson (Pasco, WA, USA) 171
Traveling front approximations for infiltration into stratified soils
A.W. Warrick (Tucson, AZ, USA) 213
Factors controlling stable isotope composition of rainfall in New Delhi, India
P.S. Datta, S.K. Tyagi and H. Chandrasekharan (New Delhi, India) 223
Evaluation of the accuracy and precision of annual phosphorus load estimates from two agricultural basins in Finland
S. Rekolainen, M. Posch, J. Kämäri and P. Ekholm (Helsinki, Finland). 237
An isotopic study of groundwater supplies in the Eastern Province of Kenya
M.G. Sklash (Windsor, Ont., Canada) and M.P. Mwangi (Njoro, Kenya) 257
Predicting soil-surface seal conductance from incipient ponding and infiltration data
R.L. Baumhardt (Lubbock, TX, USA), M.J.M. Römkens (Oxford, MS, USA), J.-Y. Parlange (Ithaca, NY, USA) and F.D. Whisler (Starkville, MS, USA). 277
Laboratory determination of unsaturated hydraulic conductivity using a generalized-form hydraulic model
J.D. Valiantzas and A. Sassalou (Athens, Greece) 293
The effects of overburden stress on the specific storage and hydraulic conductivity of artesian aquifers
N. Sepúlveda and A.L. Zack (San Juan, PR, USA). 305
Movement of a non-reactive solute tracer during steady and intermittent leaching
M.L. Sharma and M. Taniguchi (Wembley, W.A., Australia) 323

Estimation of the gain factor for a discrete linear time-invariant system when the input and output series each have zero mean
K.M. O'Connor and M. Ahsan (Galway, Ireland) 335
Graphical estimation of the Theis drawdown function
W.E. Bardsley (Hamilton, New Zealand) 357

Discussion

Evaluation of three evapotranspiration models in terms of their applicability for an arid region — Comment
F.I. Morton (Wakefield, Que., Canada) 369

Book Reviews

Nant-y-Moch Grassland Improvement Study 375
Hydrotitles: Hydroscience Bibliography 376
Analysis of Biogeochemical Cycling Processes in Walker Branch Watershed 377
Environmental Isotope Data No. 9 380